

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 5-4-77		JUN 6 1977	
Company HOLLEY ENERGY INC.				Connection TO AIR		Unit O. C. C. ARTESIA, OFFICE	
Pool BUFFALO VALLEY				Formation ATOKA		Farm or Lease Name LULA	
Completion Date 5-4-77		Total Depth 8767		Plug Back TD 8651		Elevation 3691 GR.	
Csg. Size 4 1/2"	Wt. 11.6	d 4.000	Set At 8762	Perforations: From 8495 To 8505		Well No. 2	
Tbg. Size 2 3/8"	Wt. 4.7	a 1.995	Set At 8414	Perforations: From OPEN ENDED To		Unit Sec. Twp. Rge. D 7 15S 28E	
Type Well - Single - Brazenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 8414		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 158 @ 8414		Mean Annual Temp. °F 13.2		State N.M.	
L 8414	H 8414	Gg .691	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run 3
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Duration of Flow
1.	3	x	1.00	440	8	138	1 h.
2.	3	x	1.00	450	16	130	1 h.
3.	3	x	1.00	450	32	122	1 h.
4.	3	x	1.00	460	40	120	1 h.
5.							
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	5.118	60.21	453.2	.9325	1.203	1.033	357
2.	5.118	86.09	463.2	.9388	1.203	1.035	515
3.	5.118	121.75	463.2	.9452	1.203	1.036	734
4.	5.118	137.58	473.2	.9469	1.203	1.039	833
5.							
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.		
1.	.68	598	1.54	.938	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		
2.	.69	590	1.52	.934	Specific Gravity Separator Gas .691 XXXXXXXXXX		
3.	.69	582	1.50	.931	Specific Gravity Flowing Fluid XXXXXX		
4.	.71	580	1.49	.927	Critical Pressure 669 P.S.I.A. P.S.I.A.		
5.					Critical Temperature 388 R R		
NO.	P _t ²	P _w ²	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.308$		
1.	1918.0	3678.9	2043.7		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.308$		
2.	1697.2	2880.5	2842.1		AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.090$		
3.	1438.2	2068.4	3654.2				
4.	1161.5	1349.1	4373.5				
5.							
Absolute Open Flow 1.090 Mcfd @ 15.025				Angle of Slope θ 45°		Slope, n 1.00	
Remarks: NO WAY TO MEASURE FLUID, POINT ALIGNMENT TOO FLAT A SLOPE OF 45° DRAWN THROUGH HIGH RATE OF FLOW							
Approved By Commission:		Conducted By: G.J.P.		Calculated By: R.E.R.		Checked By: J.W.W.	